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TYPICAL INDIRECT COST POOLS

The establishment of separate indirect cost pools improves the visibility of these difficult-to-control costs and facilitates the monitoring of similar types of expenses. Based upon the contractor's needs for pricing and control, he groups his indirect costs into logical cost pools relating to major functions and activities performed, types of products produced, company-specific organizational structure, market served, and other considerations. Contractors whose products, services, or contracts are substantially different will naturally require more detailed cost pools. The type or number of indirect cost pools necessary for a contractor's business segment is not specified by industry standards or government regulations, and consequently will vary significantly.

After indirect costs are properly pooled, they are distributed to cost objectives using a direct cost distribution base that is common to all cost objectives to which the indirect costs are to be allocated. The various methods of distributing or allocating overhead costs to contracts will be discussed in detail in Chapter 4.

Indirect cost pools can be categorized as overhead, service center, or general and administrative (G&A) expense pools. The primary distinction between overhead and G&A is that overhead costs only benefit a part of a business segment (e.g., a functional organization such as engineering or manufacturing), while the G&A expense pool benefits the entire organization. Exhibit 4, "Typical Contractor Cost Hierarchy," shows the three broad categories of indirect cost pools that will require assignment or allocation to contracts (i.e., service centers, overhead pools, and the G&A pool). Note that the contractor's business segment has three major contracts and several independent research and development/bid and proposal projects (IR&D/B&P), all using direct material, direct labor, and other direct cost, with four service centers, eight overhead pools, and one G&A cost pool. Of course, if a contractor is to be profitable, the objective must be to assign all costs to contracts or "final cost objectives."

OVERHEAD POOLS

It is very common to find separate overhead pools for engineering, manufacturing, material handling, and for certain off-site activities, particularly those performed at government facilities as opposed to contractor-owned facilities. Yet, it is conceivable that a very small contractor could have only one overhead pool. However, since defense industry products and services are usually very complex and very different from commercial products, defense contractors normally have multiple overhead pools. Generally, the accuracy of cost information and management visibility are improved by the introduction of additional indirect cost pools. Again, the type and number of indirect cost pools vary significantly. One contractor may have 8 overhead pools; another may have more than 100. Even the same corporation will often have totally different overhead pool structures for various business segments or separate divisions within the corporation. More detailed government regulatory requirements in the CAS and FAR relating to the criteria for accumulating indirect costs into cost pools will be discussed in Chapter 7.

Exhibit 4. Typical Contractor Cost Hierarchy

Most defense contractors will have separate overhead pools for engineering and manufacturing. Engineering overhead includes the costs of directing and supporting all activities relating to the engineering organization that cannot be assigned to specific contracts. Engineering overhead typically includes engineering supervision, engineering policies and procedures, depreciation of engineering buildings and equipment, software, training, maintenance, supplies, scientific library, and fringe benefits. Manufacturing overhead, sometimes called factory overhead or factory burden, usually includes all items of production costs except direct material, direct labor, and other direct costs. The component elements of manufacturing overhead typically consist of several major categories of expense, including supervision, administration, time standards engineering, manufacturing research, tool cribs, maintenance, indirect supplies such as small tools, grinding wheels, and cleaning supplies. It usually includes the costs associated with factory labor fringe benefits, such as social security taxes, leave, group health insurance, etc. It also includes factory-related fixed charges for depreciation, insurance, rent, and property taxes. Manufacturing overhead is often broken down into several overhead pools rather than one overall manufacturing pool. This is particularly the case when several different products require varying amounts of overhead support. For example, separate overhead pools are often found for assembly, fabrication, tooling, and quality. Engineering and manufacturing overhead pools are sometimes referred to as "resource pools" because they collect or pool the costs of administrative and other indirect expenses associated with centralized resource organizations that support multiple products.

If a contractor's activities are spread out geographically, the use of separate off-site indirect cost pools for each geographic location will normally produce more accurate allocations of indirect cost than the use of in-plant or company-wide pools. Overhead pools established for off-site or remote locations should be based on eliminating from the overhead pool indirect costs that do not provide a benefit for the off-site activities. For example, occupancy costs would be eliminated from off-site pools for work performed at government facilities because the contractor uses government facilities rather than his own. If a substantial traveling distance is involved, a reduction could also be made for management and supervisory expenses. Rather than having separate rates for each site, some contractors have established field service overhead pools to cover all work at customer locations away from the main plant.

Defense contractors sometimes establish "product pools" with the objective of increasing the direct traceability of costs to individual product lines. Such pools are often established for dedicated program or product engineering, procurement, spares, or other elements in order to identify similar product overhead costs with benefiting contracts or final cost objectives. Product pools are normally established for new programs during the bid phase and may be discontinued when the effort is complete and all program costs are recorded. If a program phases down to a small effort over an extended time, the pool may be merged with another pool. Examples of product pools could be missile systems, electronic systems, advanced projects, special projects, space systems, or Program X.

Material overhead, which is commonly called material handling, normally includes the functions of purchasing, receiving and inspection, handling and storage, inventory control, and expediting of materials required for contracts. Other examples of separate overhead cost pools often found in the defense industry include overhaul and repair, modification, manufacturing development, subcontract administration,

testing, packing and crating, customer service, product support, and fringe benefits.

SERVICE CENTERS

Service centers are departments or other functional organizations that perform specific technical or administrative work for the benefit of other organizational units. Their costs may be allocated partially to contracts as direct costs and partially to other indirect cost pools, usually based on some measure of usage. For example, the cost of the computer service center could be charged directly to contracts or to other indirect cost pools on the basis of the hours worked by programmers. The programmers could be performing scientific programming for a specific engineering contract, programming numerically controlled machines for the manufacturing overhead function, updating an inventory control system for the material handling overhead function, or modifying a payroll system for accounting, which would be a G&A function. Of course, the programmers could not charge both direct and indirect costs for the same task. Each task worked on must have one and only one labor charge. Use and occupancy is another example of a very large service center commonly found in the defense industry. This service center is normally distributed based upon square footage occupied by users. It includes the costs for depreciation, maintenance, utilities, leases, security and fire protection, environmental cleanup, and facilities engineering.

From an accounting standpoint, service centers are usually closed out each month by transferring or allocating the cost of operating the service to the responsible users. Exhibit 4, "Typical Contractor Cost Hierarchy," shows service centers for computer services, operations, industrial engineering, and use and occupancy. Exhibit 5, "Final Overhead Pools," shows how an appropriate amount of these service center costs might be allocated to the various final overhead pools. These amounts are shown at the bottom of the exhibit under the category of "Allocations." Recognize that some service center costs will be charged directly to contracts based upon use if that occurs.

Other examples of service centers often found in the defense industry are print shops, graphic arts, reproduction services, communication services, motor pools, mail rooms, technical publications, calibration labs, wind tunnels, and corporate aircraft. Some contractors refer to service centers as secondary pools, support pools, or prorate departments. In government contract accounting terms, they are referred to as "intermediate cost objectives." They are so called because costs are temporarily collected in the service center as an intermediate step before they are later allocated to final cost objectives, such as specific contracts.

GENERAL AND ADMINISTRATIVE EXPENSE POOL

General and administrative expenses (G&A) represent the cost of activities that are necessary to the overall operation of the business as a whole but a direct relationship to any particular cost objective cannot be shown. G&A includes the top management functions for executive control and direction over all personnel, departments, facilities, and activities of a business segment. Typically, it includes human resources, accounting, finance, public relations, contract administration, legal, selling, independent research and development, bid and proposal expenses, and an expense allocation from the corporate home office.

Note that a contractor's selling expenses may be included in the G&A expense pool or may be accounted for in a separate cost pool. Selling expenses are the efforts to market a contractor's products or services and include

expenses for advertising, corporate image enhancement, market planning, and direct selling.

G&A also usually includes executive bonuses, incentive awards, stock options, and business entertainment expenses. It represents the most controversial area for questioning the reasonableness of cost allocations to government contracts. In this regard, the government does not allow profit on G&A cost when computing its "profit objective" for negotiating flexibly priced contracts. It is important to note that the government position of not recognizing profit on G&A may not be apparent when one examines a billing submitted by a contractor on a cost-type contract. The profit rate on the billing may be applied to the total cost incurred, which includes G&A. However, it should be recognized that the government personnel did not consider G&A as a profit-bearing cost when they arrived at their profit rate objective prior to negotiations. Therefore, one would expect the defense contractor to minimize the cost classified as G&A.

Since G&A costs relate to the operation of the business as a whole, any cost that can be directly distributed to both government and commercial work of the contractor should be removed from G&A and distributed to the appropriate cost objective, such as a contract or appropriate overhead cost pool. Each contractor business segment has its own G&A cost pool and while there can be many overhead pools, there is only one G&A pool for a business segment. Note in Exhibit 4 that a contractor's business segment G&A usually includes major costs for segment-level general and administrative expenses, an appropriate allocation of corporate home office expenses, independent research and development expenses, and bid and proposal expenses. However, note in Exhibit 5, "Final Overhead Cost Pools," the G&A cost pool does not include independent research and development expenses or bid and proposal expenses (IR&D/B&P). IR&D/B&P is absent from this exhibit is because these costs have to be handled in a very prescribed way, in accordance with government contract requirements. We will have to discuss how overhead rates are computed before we can address the proper treatment for IR&D/B&P expenses. We will revisit this matter in Chapter 4 when we discuss the requirements for deriving the total cost of IR&D/B&P projects and then transferring these very significant costs to the G&A cost pool.

MAJOR CATEGORIES OF INDIRECT EXPENSES

Since each overhead pool normally includes hundreds of individual indirect expense accounts, contractors will summarize these accounts within each cost pool into major subdivisions or categories for management control purposes. Exhibit 5 summarizes the many indirect expense accounts into five primary classifications of salaries and wages, fringe benefits, supplies and services, other expenses, and service center allocations. There is no prescribed way of doing this and all companies summarize as they choose.

Many overhead costs are for personnel, and these costs will usually make up a very significant amount of overhead costs. Personnel costs include salaries and wages of indirect labor (those employees needed to run the organization but whose work bears no direct relationship to any specific contract) and fringe benefits for both direct and indirect employees. Fringe benefits are the costs associated with labor such as health and life insurance, leave, social security taxes, and pensions. It is not unusual in the defense industry for fringe benefits to approximate 50 percent of labor costs. Supplies and services are those indirect items not assignable as a direct cost to a contract but relate to all contracts (e.g., lubricating oil, per-

ishable tools, nuts and bolts, calibration). "Other expenses" is a catch-all category that includes miscellaneous items such as travel, telephone, telegraph, and employee relocation.

The allocations category represents indirect costs distributed to the final overhead pool from external organizations such as service centers or other intermediate cost objectives. These costs usually always include the fair share of facilities-related cost including fixed asset depreciation, repair and maintenance, leased equipment, and utilities. In our example of Exhibit 4, they include service center allocations from use and occupancy, computing services, operations services, and industrial engineering.

It should be noted that some companies may include fringe benefits as a part of their direct labor rate as opposed to classifying fringe benefits as a part of overhead. Either method is acceptable. However, since fringe benefits are such a significant amount, they will have a very significant impact upon reducing overhead rates when they are a part of direct labor. We will discuss this later when we examine allocation methods and indirect rate computations.

INDIRECT COSTS	ENG	FAB	ASSY	TOOLING	MATERIAL HANDLING	PRODUCT "A"	PRODUCT "B"	OFF SITE	G&A
Salaries & Wages:									
Supervision	$ 3,701	$ 19,674	$ 6,246	$ 729	$ 4,235	$ 177	$ 301	$ 260	$ 21,982
Indirect Labor	33,310	91,811	28,105	4,666	33,876	694	1,157	1,214	88,636
OTP	925	18,362	4,164	198	42,345	59	141	87	2,836
Training	5,552	1,202	520	255	2,879	231	347	130	2,978
Idle Time	19	219	104	24	85	1	2		
Total Salaries & Wages	$ 43,507	$ 131,267	$ 39,139	$ 5,872	$ 83,420	$ 1,162	$ 1,948	$ 1,692	$ 116,432
Fringe Benefits:									
Health & Life Ins	$ 29,609	$ 40,768	$ 17,175	$ 4,008	$ 6,288	$ 1,851	$ 3,701	$ 1,388	$ 1,595
Workmen's Comp	1,851	31,041	12,491	1,093	5,336	116	231	173	4,432
Annual Leave	7,402	8,744	4,164	972	2,287	463	925	347	3,900
Holiday	9,253	10,930	5,205	1,214	1,906	578	1,157	434	2,482
Sick & Pers Lv	3,701	7,651	3,123	559	953	231	463	173	1,773
FICA Taxes	14,804	17,488	8,327	1,943	3,049	925	1,851	694	1,578
Unempl Taxes	1,851	2,186	1,041	243	381	116	231	87	1,064
Retirement Plan	16,655	19,674	9,368	2,186	3,430	1,041	2,082	781	2,570
Savings Plan	3,701	4,372	2,082	486	762	231	463	173	2,322
Total Fringe Benefits	$ 88,827	$ 142,853	$ 62,977	$ 12,703	$ 24,391	$ 5,552	$ 11,103	$ 4,250	$ 21,716
Supplies/Svcs:									
Operating	$ 925	$ 18,624	$ 6,402	1,241	4,235	29	35		106
Maintenance	37	1,093	520	121	898	5	12		21
Perishable Tools	1,110	9,181	4,372	1,020	51	30	8		
Cal & Cert	370	656	312	73	34	23	46		
Office Supplies	925	874	427	97	728	60	46		1,950
Total Supplies/Svcs	$ 3,368	$ 30,429	$ 412,033	$ 2,553	$ 5,945	$ 147	$ 148		$ 2,078
Other Expenses:									
Travel	$ 7,032	$ 1,749	$ 833	$ 194	$ 8,469	$ 160	$ 319		$ 8,864
Telephone	4,626	1,093	520	121	1,186	289	578		10,016
Busn Meetings	925	66	31	20	593	60	21		1,773
Employee Relocation	555	44	21	5	102	40	81		124
Dues & Subscriptions	370	46	21	8	31	18	35		1,773
Employee Welfare	185	334	159	37	38	23	46		121
Total Other Expenses	$ 13,694	$ 3,331	$ 1,585	$ 386	$ 10,418	$ 590	$ 1,081		$ 22,669
Allocations:									
Use & Occupancy	$ 60,653	$ 98,423	$ 31,705	$ 13,785	$ 27,845	$ 3,860	$ 7,719		$ 31,705
Computing Svcs	22,465	14,145	4,160	2,496	14,145	1,165	1,331		23,297
Operations Svcs	556	33,381	20,665	2,384	18,280	397	636		3,179
Industrial Eng		5,464	2,484	1,987					
Total Allocations	$ 83,675	$ 151,413	$ 59,014	$ 20,652	$ 60,270	$ 5,422	$ 9,687		$ 58,181
Total Indirect Expenses	$ 233,070	$ 459,294	$ 174,748	$ 42,165	$ 184,445	$ 12,874	$ 23,966	$ 5,942	$ 221,076

Exhibit 5. Final Overhead Cost Pools (In Thousands)